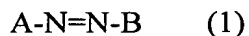


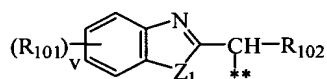
# AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A hair dyeing composition comprising a dissociative azo dye represented by formula (1)

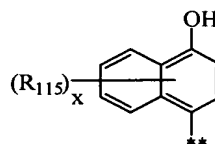


wherein "A" represents a phenyl or naphthyl group which may be substituted; "B" represents an atomic group containing a dissociative proton selected from groups (B-1) to (B-12) binding via symbol \*\* to the azo group consisting of:

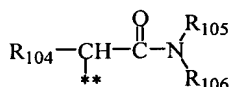
(B-1)



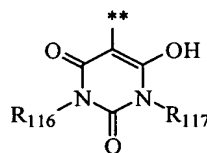
(B-7)



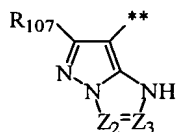
(B-2)



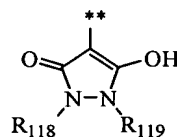
(B-8)



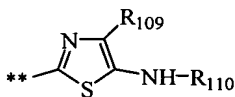
(B-3)



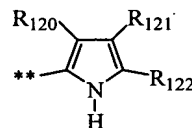
(B-9)



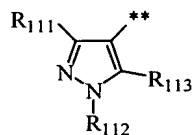
(B-4)



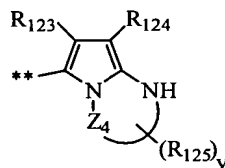
(B-10)



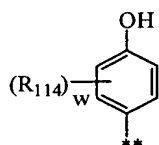
(B-5)



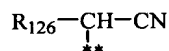
(B-11)



(B-6)



(B-12)



wherein R<sub>101</sub> represents a halogen atom, alkyl group, aryl group, hetero-ring group, cyano group, alkoxy group, amino group (including anilino group), acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, sulfamoyl group, alkylsulfonyl group, or carbamoyl group, R<sub>102</sub> and R<sub>104</sub> each independently represent cyano group, alkylsulfonyl group, arylsulfonyl group, acyl group, alkoxycarbonyl group, aryloxy carbonyl group, or carbamoyl group. Z<sub>1</sub> represents oxygen atom, sulfur atom, or -N(R<sub>103</sub>)-, wherein R<sub>103</sub> represents hydrogen atom, alkyl group, aryl group or hetero-ring group, "v" represents an integer of 0 to 4, wherein several R<sub>101</sub> groups may be the same or different;

R<sub>105</sub> and R<sub>106</sub> independently represent a hydrogen atom, alkyl group, aryl group, or hetero-ring group;

R<sub>107</sub> represents a hydrogen atom, alkyl group, aryl group, hetero-ring group, alkoxy group, aryloxy group, amino group (including anilino group), acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, alkylsulfonyl group, arylsulfonyl group, or carbamoyl group; Z<sub>2</sub> and Z<sub>3</sub> independently represent -C(R<sub>108</sub>)= or -N=; R<sub>108</sub> represents alkyl group, aryl group, hetero-ring group, alkylthio group, arylthio group, alkoxycarbonyl group, or carbamoyl group, wherein if Z<sub>2</sub> and Z<sub>3</sub> both represent -C(R<sub>108</sub>)=, two R<sub>108</sub> groups may be the same or different or may bind together to form a carbon ring or a hetero-ring;

R<sub>109</sub> represents an alkyl group, aryl group or hetero-ring group, and R<sub>110</sub> represents a hydrogen atom, alkyl group, aryl group, hetero-ring group, acyl group, alkylsulfonyl group or arylsulfonyl group,

R<sub>111</sub> represents a hydrogen atom, alkyl group, aryl group, alkoxy group, amino group (including anilino group), alkoxycarbonyl group, cyano group, acylamino group, or carbamoyl group; R<sub>112</sub> represents hydrogen atom, alkyl group, aryl group, or hetero-ring group; R<sub>113</sub> represents hydroxy group or amino group,

R<sub>114</sub> and R<sub>115</sub> represent a halogen atom, alkyl group, aryl group, nitro group, aryloxy

group, anilino group, acylamino group, alkoxycarbonylamino group, aminocarbonylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, hetero-ring thio group, alkoxycarbonyl group, or carbamoyl group; "w" represents an integer of from 1 to 4, wherein several R<sub>114</sub> groups in the number "w" may be the same or different; "x" represents an integer of from 0 to 6, wherein several R<sub>115</sub> groups in the number "x" may be the same or different,

R<sub>116</sub>, R<sub>117</sub>, R<sub>118</sub>, and R<sub>119</sub> independently represent an alkyl group or aryl group, R<sub>120</sub> and R<sub>121</sub> independently represent an alkyl group, aryl group, hetero-ring group, cyano group, alkylsulfonyl group, arylsulfonyl group, alkoxycarbonyl group, or carbamoyl group; R<sub>122</sub> represents a hydrogen atom, alkyl group, aryl group, hetero-ring group, acylamino group, alkylsulfonylamino group, or arylsulfonylamino group,

R<sub>123</sub> and R<sub>124</sub> independently represent an alkyl group, aryl group, hetero-ring group, cyano group, alkylsulfonyl group, arylsulfonyl group, alkoxycarbonyl group, or carbamoyl group; Z<sub>4</sub> represents a non-metal atomic group forming a 5-membered or 6-membered ring, together with the two nitrogen atoms and one carbon atom, R<sub>125</sub> represents an alkyl group, aryl group, alkoxy group, amino group, acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, acyl group, alkoxycarbonyl group, or carbamoyl group; "y" represents an integer of from 0 to 2, when Z<sub>4</sub> forms a 5-membered ring; and "y" represents an integer of from 0 to 3, when Z<sub>4</sub> forms a 6-membered ring, and

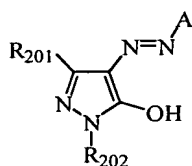
R<sub>126</sub> represents an alkyl group, aryl group, cyano group or alkoxy carbonyl group; and wherein R<sub>101</sub> to R<sub>126</sub> in formulas (B-1) to (B-12) may have additional substituents;  
and,

with the proviso "A" and "B" are free of sulfo, carboxyl and quaternary ammonium groups.

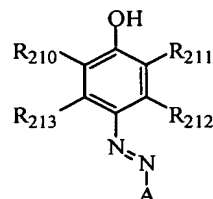
2. (Canceled)

3. (Currently Amended) The hair dyeing composition according to claim 1, wherein the structure of the azo dye is represented by any one of DS-1 to DS-9:

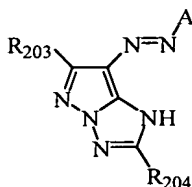
DS-1



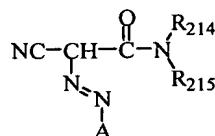
DS-5



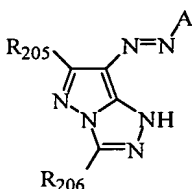
DS-2



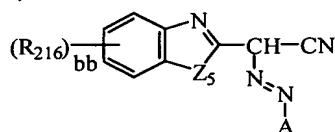
DS-6



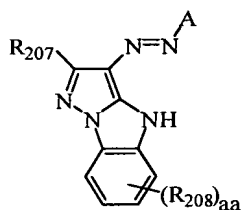
DS-3



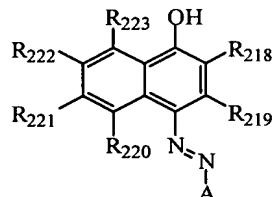
DS-7



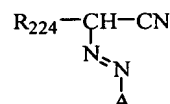
DS-4



DS-8



DS-9



wherein "A" has the same meaning as defined in claim 1;

R<sub>201</sub> represents a hydrogen atom, alkyl group, aryl group, alkoxy group, amino group (including anilino group), alkoxycarbonyl group, cyano group, acylamino group, or carbamoyl group; R<sub>202</sub> represents a hydrogen atom, alkyl group, aryl group, or hetero-ring group;

R<sub>203</sub>, R<sub>205</sub> and R<sub>207</sub> represent a hydrogen atom, alkyl group, aryl group, hetero-ring group, alkoxy group, aryloxy group, amino group (including anilino group), acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, alkylsulfonyl group, arylsulfonyl group, or carbamoyl group; R<sub>204</sub> represents an alkyl group,

aryl group, or hetero-ring group;

R<sub>206</sub> represents an alkyl group, aryl group, hetero-ring group, alkylthio group, arylthio group, alkoxycarbonyl group, or carbamoyl group;

R<sub>208</sub> represents a halogen atom, alkyl group, aryl group, hetero-ring group, alkoxy group, aryloxy group, amino group (including anilino group), acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, alkylsulfonyl group, arylsulfonyl group, alkoxycarbonyl group, or carbamoyl group; "aa" represents an integer of from 0 to 4, provided that aa is 2 to 4, the R<sub>208</sub> groups may be the same or different;

~~R<sub>210</sub> and R<sub>211</sub> independently represent~~ represents a hydrogen atom, halogen atom, alkyl group, aryl group, acylamino group, alkoxycarbonyl group, aminocarbonylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkoxycarbonylamino group, or carbamoyl group; R<sub>211</sub> represents a halogen atom, alkyl group, aryl group, acylamino group, alkoxycarbonyl group, aminocarbonylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkoxycarbonylamino group, or carbamoyl group; R<sub>212</sub> and R<sub>213</sub> independently represent a hydrogen atom, halogen atom, alkyl group, alkoxy group, or acylamino group;

R<sub>214</sub> and R<sub>215</sub> independently represent a hydrogen atom, alkyl group, aryl group, or hetero-ring group;

R<sub>216</sub> represents a halogen atom, alkyl group, aryl group, hetero-ring group, cyano group, alkoxy group, amino group (including anilino group), acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, sulfamoyl group, alkylsulfonyl group, or carbamoyl group; Z<sub>5</sub> represents an oxygen atom, sulfur atom, or -N(R<sub>217</sub>)-, where R<sub>217</sub> represents a hydrogen atom, alkyl group, aryl group, or hetero-ring group; "bb" represents an integer of from 0 to 4; provided that if "bb" is a plural number, the R<sub>216</sub> groups in the number "bb" may be the same or different;

R<sub>218</sub> represents a hydrogen atom, halogen atom, alkyl group, aryl group, acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkoxycarbonylamino group,

aminocarbonylamino group, carbamoyl group, or sulfamoyl group;  $R_{220}$  and  $R_{223}$  independently represent a hydrogen atom, halogen atom, acylamino group, alkoxycarbonylamino group, aminocarbonylamino group, alkylsulfonylamino group, or arylsulfonylamino group;  $R_{219}$ ,  $R_{221}$ , and  $R_{222}$  independently represent a hydrogen atom, chlorine atom, bromine atom, alkyl group, or acylamino group; and

$R_{224}$  represents an alkyl group, aryl group, cyano group or alkoxycarbonyl group wherein  $R_{201}$  to  $R_{224}$  in formulas DS-1 to DS-9 may have additional substituents.

4. (Original) The hair dyeing composition according to claim 1, wherein the azo dye of formula (1) is present in an amount of from about 0.0001 to 20 % by weight, based on the whole composition.

5. (Original) The hair dyeing composition according to claim 1, further comprising at least one direct dye other than the azo dye of general formula (1) and/or at least one oxidative dye.

6. (Original) The hair dyeing composition as claimed in claim 5, wherein the total amount of the dyes present in said composition is from about 0.001% to 20 % by weight, based on the whole composition.

7. (Original) The hair dyeing composition according to claim 1, further comprising an alkaline agent in an amount of from about 0.01% to 20 % by weight, based on the whole composition.

8. (Original) The hair dyeing composition as defined in claim 1, being a one part composition, a two part composition or a three part composition, wherein the two part composition comprises a first part containing an alkaline agent and a second part containing an oxidative agent, and wherein the three part composition contains the first and second parts

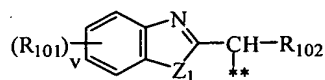
and additionally a third part containing a powdery oxidizing agent, wherein in each of the said composition the direct dye having formula (1) is contained in either one of the respective parts or in each part.

9. (Currently Amended) A method for dyeing human or animal hair, comprising applying a composition comprising an azo dye represented by formula (1) to the hair, rinsing the hair after completion of the dyeing and drying the hair:

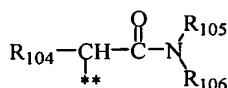


wherein "A" represents a phenyl or naphthyl group which may be substituted; "B" represents an atomic group containing a dissociative proton selected from groups (B-1) to (B-12) binding via symbol \*\* to the azo group consisting of:

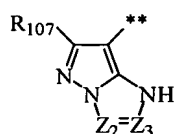
(B-1)



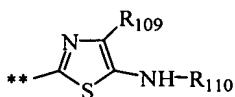
(B-2)



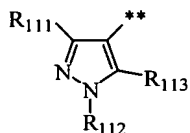
(B-3)



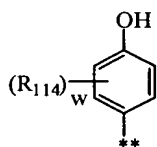
(B-4)



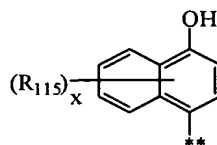
(B-5)



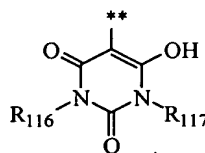
(B-6)



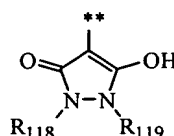
(B-7)



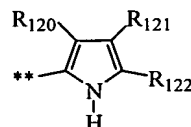
(B-8)



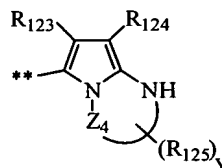
(B-9)



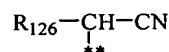
(B-10)



(B-11)



(B-12)



wherein  $R_{101}$  represents a halogen atom, alkyl group, aryl group, hetero-ring group, cyano group, alkoxy group, amino group (including anilino group), acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, sulfamoyl group, alkylsulfonyl group, or carbamoyl group,  $R_{102}$  and  $R_{104}$  each independently represent cyano group, alkylsulfonyl group, arylsulfonyl group, acyl group, alkoxycarbonyl group, aryloxycarbonyl group, or carbamoyl group.  $Z_1$  represents oxygen atom, sulfur atom, or  $-N(R_{103})-$ , wherein  $R_{103}$  represents hydrogen atom, alkyl group, aryl group or hetero-ring



group, "v" represents an integer of 0 to 4, wherein several R<sub>101</sub> groups may be the same or different;

R<sub>105</sub> and R<sub>106</sub> independently represent a hydrogen atom, alkyl group, aryl group, or hetero-ring group;

R<sub>107</sub> represents a hydrogen atom, alkyl group, aryl group, hetero-ring group, alkoxy group, aryloxy group, amino group (including anilino group), acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, alkylsulfonyl group, arylsulfonyl group, or carbamoyl group; Z<sub>2</sub> and Z<sub>3</sub> independently represent -C(R<sub>108</sub>)= or -N=; R<sub>108</sub> represents alkyl group, aryl group, hetero-ring group, alkylthio group, arylthio group, alkoxycarbonyl group, or carbamoyl group, wherein if Z<sub>2</sub> and Z<sub>3</sub> both represent -C(R<sub>108</sub>)=, two R<sub>108</sub> groups may be the same or different or may bind together to form a carbon ring or a hetero-ring;

R<sub>109</sub> represents an alkyl group, aryl group or hetero-ring group, and R<sub>110</sub> represents a hydrogen atom, alkyl group, aryl group, hetero-ring group, acyl group, alkylsulfonyl group or arylsulfonyl group,

R<sub>111</sub> represents a hydrogen atom, alkyl group, aryl group, alkoxy group, amino group (including anilino group), alkoxycarbonyl group, cyano group, acylamino group, or carbamoyl group; R<sub>112</sub> represents hydrogen atom, alkyl group, aryl group, or hetero-ring group; R<sub>113</sub> represents hydroxy group or amino group,

R<sub>114</sub> and R<sub>115</sub> represent a halogen atom, alkyl group, aryl group, nitro group, aryloxy group, anilino group, acylamino group, alkoxycarbonylamino group, aminocarbonylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, hetero-ring thio group, alkoxycarbonyl group, or carbamoyl group; "w" represents an integer of from 1 to 4, wherein several R<sub>114</sub> groups in the number "w" may be the same or different; "x" represents an integer of from 0 to 6, wherein several R<sub>115</sub> groups in the number "x" may be the same or different,

R<sub>116</sub>, R<sub>117</sub>, R<sub>118</sub>, and R<sub>119</sub> independently represent an alkyl group or aryl group, R<sub>120</sub> and R<sub>121</sub> independently represent an alkyl group, aryl group, hetero-ring group, cyano group,

alkylsulfonyl group, arylsulfonyl group, alkoxycarbonyl group, or carbamoyl group; R<sub>122</sub> represents a hydrogen atom, alkyl group, aryl group, hetero-ring group, acylamino group, alkylsulfonylamino group, or arylsulfonylamino group,

R<sub>123</sub> and R<sub>124</sub> independently represent an alkyl group, aryl group, hetero-ring group, cyano group, alkylsulfonyl group, arylsulfonyl group, alkoxycarbonyl group, or carbamoyl group; Z<sub>4</sub> represents a non-metal atomic group forming a 5-membered or 6-membered ring, together with the two nitrogen atoms and one carbon atom, R<sub>125</sub> represents an alkyl group, aryl group, alkoxy group, amino group, acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, acyl group, alkoxycarbonyl group, or carbamoyl group; "y" represents an integer of from 0 to 2, when Z<sub>4</sub> forms a 5-membered ring; and "y" represents an integer of from 0 to 3, when Z<sub>4</sub> forms a 6-membered ring, and

R<sub>126</sub> represents an alkyl group, aryl group, cyano group or alkoxy carbonyl group;

and wherein R<sub>101</sub> to R<sub>126</sub> in formulas (B-1) to (B-12) may have additional substituents;

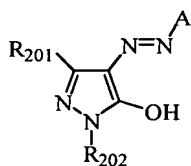
and,

with the proviso "A" and "B" are free of sulfo, carboxyl and quaternary ammonium groups.

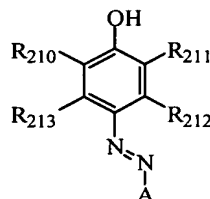
10. (Canceled)

11. (New) The method according to claim 9, wherein the structure of the azo dye is represented by any one of DS-1 to DS-9:

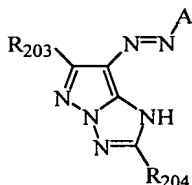
DS-1



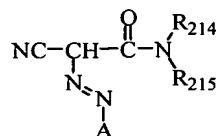
DS-5



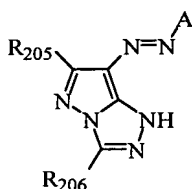
DS-2



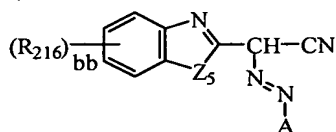
DS-6



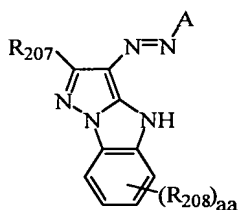
DS-3



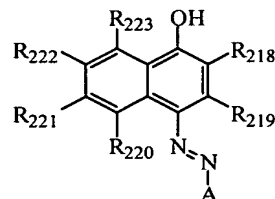
DS-7



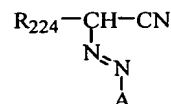
DS-4



DS-8



DS-9



wherein "A" has the same meaning as defined in claim 1;

R<sub>201</sub> represents a hydrogen atom, alkyl group, aryl group, alkoxy group, amino group (including anilino group), alkoxycarbonyl group, cyano group, acylamino group, or carbamoyl group; R<sub>202</sub> represents a hydrogen atom, alkyl group, aryl group, or hetero-ring group;

R<sub>203</sub>, R<sub>205</sub> and R<sub>207</sub> represent a hydrogen atom, alkyl group, aryl group, hetero-ring group, alkoxy group, aryloxy group, amino group (including anilino group), acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, alkylsulfonyl group, arylsulfonyl group, or carbamoyl group; R<sub>204</sub> represents an alkyl group,

aryl group, or hetero-ring group;

R<sub>206</sub> represents an alkyl group, aryl group, hetero-ring group, alkylthio group, arylthio group, alkoxycarbonyl group, or carbamoyl group;

R<sub>208</sub> represents a halogen atom, alkyl group, aryl group, hetero-ring group, alkoxy group, aryloxy group, amino group (including anilino group), acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, alkylsulfonyl group, arylsulfonyl group, alkoxycarbonyl group, or carbamoyl group; "aa" represents an integer of from 0 to 4, provided that aa is 2 to 4, the R<sub>208</sub> groups may be the same or different;

R<sub>210</sub> represents a hydrogen atom, halogen atom, alkyl group, aryl group, acylamino group, alkoxycarbonyl group, aminocarbonylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkoxycarbonylamino group, or carbamoyl group; R<sub>211</sub> represents a halogen atom, alkyl group, aryl group, acylamino group, alkoxycarbonyl group, aminocarbonylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkoxycarbonylamino group, or carbamoyl group; R<sub>212</sub> and R<sub>213</sub> independently represent a hydrogen atom, halogen atom, alkyl group, alkoxy group, or acylamino group;

R<sub>214</sub> and R<sub>215</sub> independently represent a hydrogen atom, alkyl group, aryl group, or hetero-ring group;

R<sub>216</sub> represents a halogen atom, alkyl group, aryl group, hetero-ring group, cyano group, alkoxy group, amino group (including anilino group), acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkylthio group, arylthio group, sulfamoyl group, alkylsulfonyl group, or carbamoyl group; Z<sub>5</sub> represents an oxygen atom, sulfur atom, or -N(R<sub>217</sub>)-, where R<sub>217</sub> represents a hydrogen atom, alkyl group, aryl group, or hetero-ring group; "bb" represents an integer of from 0 to 4; provided that if "bb" is a plural number, the R<sub>216</sub> groups in the number "bb" may be the same or different;

R<sub>218</sub> represents a hydrogen atom, halogen atom, alkyl group, aryl group, acylamino group, alkylsulfonylamino group, arylsulfonylamino group, alkoxycarbonylamino group, aminocarbonylamino group, carbamoyl group, or sulfamoyl group; R<sub>220</sub> and R<sub>223</sub>

independently represent a hydrogen atom, halogen atom, acylamino group, alkoxycarbonylamino group, aminocarbonylamino group, alkylsulfonylamino group, or arylsulfonylamino group;  $R_{219}$ ,  $R_{221}$ , and  $R_{222}$  independently represent a hydrogen atom, chlorine atom, bromine atom, alkyl group, or acylamino group; and

$R_{224}$  represents an alkyl group, aryl group, cyano group or alkoxycarbonyl group wherein  $R_{201}$  to  $R_{224}$  in formulas DS-1 to DS-9 may have additional substituents.

12. (New) The method according to claim 9, wherein the azo dye of formula (1) is present in an amount of from about 0.0001 to 20 % by weight, based on the whole composition.

13. (New) The method according to claim 9, further comprising at least one direct dye other than the azo dye of general formula (1) and/or at least one oxidative dye.

14. (New) The method according to claim 13, wherein the total amount of the dyes present in said composition is from about 0.001% to 20 % by weight, based on the whole composition.

15. (New) The method according to claim 9, further comprising an alkaline agent in an amount of from about 0.01% to 20 % by weight, based on the whole composition.

16. (New) The method according to claim 9, being a one part composition, a two part composition or a three part composition, wherein the two part composition comprises a first part containing an alkaline agent and a second part containing an oxidative agent, and wherein the three part composition contains the first and second parts and additionally a third part containing a powdery oxidizing agent, wherein in each of the said composition the direct dye having formula (1) is contained in either one of the respective parts or in each part.

SUPPORT FOR THE AMENDMENTS

Claims 2 and 10 has been canceled.

Claims 1, 3, and 9 have been amended.

Claims 11-16 have been added.

The amendment of Claims 1, 3, and 9 is supported by originally filed Claims 1-3 and 9 and the specification as originally filed. Further, support for new Claims 11-16 is provided by the originally filed claims and specification, for example pages 2-62.

No new matter has been added by the present amendment.